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ILLINOIS STATE BOARD OF HEALTH—No. 53.

OFFICIAL ORDER

Concerning the Prevention of Small-Pox.

Revised and in force January 1, 1882.

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OFFICE OF THE SECRETARY,

SPRINGFIELD, ILL., January, 1882.

I. In view of the imminent danger of Small-Pox becoming still more widely spread, as the weather grows colder, it is the duty of those charged by law with the care of the public health—

First, and most importantly, to secure such a condition of every individual, child and adult, as will make him or her safe even if exposed to the contagion. *This can be certainly, readily, and inexpensively done by enforcing proper vaccination or revaccination,* as the case may be.

Secondly, to be vigilant against the introduction of the disease from without—as, for example, by a watchful supervision of hotels, lodging-houses and other resorts of travelers, and especial scrutiny of immigrants and new settlers. Although this is of incidental importance if the first injunction be obeyed, cases may occur where a non-intercourse quarantine might be justifiably enforced—as where a notoriously infected locality is lax in its protective measures, or allows its small-pox patients to wander off to other places. If such a locality deliberately ships its patients away (and such instances have not been wanting,) all concerned in the shipment—as well the transportation agency (whether railroad company, master or owner of steamboat, stage, hack or private conveyance) as the local authorities—*are criminally guilty, and should be prosecuted under the statute.*

Finally, it is the duty of all health authorities to be prompt and vigorous in enforcing such well-advised measures in the care of those who may, unfortunately, become afflicted (and of their families and households) as will prevent any spread of the disease. Under no circumstances must such cases be allowed to go at large, or be sent away to escape the cost and care of their proper treatment. They must at once be rigidly isolated, if necessary at the expense of the town, city or county; or, if transferred, by arrangement, to a neighboring small-pox hospital, the transfer must be effected in such a manner as to avoid the risk of spreading the contagion in transit.

II. In furtherance of these ends the appended *Rules and Regulations* of this BOARD—originally promulgated in March, 1881—are again published, *with the knowledge that wherever they have been thoroughly carried out, small-pox has either been averted where it threatened, or readily controlled where it had already appeared.* A sanitary necessity now exists, and the BOARD is compelled, in the interest of the public health, to use the power conferred upon it by law to meet such necessity.

This order is issued in conformity with the statute which charges the STATE BOARD with authority in all matters pertaining to quarantine, and with the duty of making all necessary rules and regulations for the preservation or improvement of the public health; and such rules and regulations have, therefore, the weight and authority of law. By the same statute their enforcement is made binding upon all health authorities in the State. Such authorities embrace—

1. Regularly constituted *Boards of Health* of incorporated cities, towns and villages.

2. *Supervisors, assessors* and *town clerks* of townships; and

3. *County commissioners* of counties in which there are no township organizations.

The officers designated in the second and third classes constitute, *ex officio*, the Boards of Health, for their respective territories, in the absence of any other provision therefor.*

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* In this connection attention is again called to the following *Order* of the STATE BOARD, made at its regular meeting, September 30, 1881:

Under the authority conferred upon the State Board of Health, by section 2 of the State Board of Health Act, it is ordered that, on and after January 1, 1882, the first cases of small-pox occurring in any county, township, town or city in this State, as also the prevalence and progress of *any* epidemic, shall be promptly reported to the Board by the local health authorities; it being borne in mind that in counties where township organizations exist, the township board is the Board of Health, and in counties not under township organization, the county commissioners act in like capacity.

Reports of first cases must be made immediately upon discovery; and of the progress of the disease from time to time—at least weekly. Forward all reports to the *Secretary, State Board of Health, Springfield, Illinois.*

All and singular of these are hereby charged with the enforcement of this ORDER and its appended rules. *Small-pox can be either totally excluded from any given community, or confined to the first cases, by so doing.* If it spread beyond the first cases, it is because of criminal neglect of these precautions, *for which neglect those who are responsible should be held accountable by their constituents.**

All needed power and authority for the enforcement of these rules are provided by the law, and should be unhesitatingly employed whenever necessary. Police officers, sheriffs, constables, and all other officers and employees of the State are specifically enjoined by the statute to aid in the enforcement of such rules and regulations.

III. In this enforcement, if a question should arise as between private rights or interests and the interests of the health of the community, the public interests must be held paramount. Therefore, to the question, which is often asked of this BOARD, as to the *right* of recompense for losses incurred by the destruction of infected clothing or other effects, a negative answer must be returned. No individual has the right to preserve contagion or infection about his premises whereby the public health may be endangered. If the destruction of the infected material be necessary in order to destroy the contagion or infection, the loss must be borne by the owner; it cannot be recovered from the community.

As to the policy and expediency of reimbursing such losses, that is a question for the consideration of the proper authorities—town, city or county; and cases might arise in which relief would properly be afforded—as, for example, where such destruction would entail great hardship upon an indigent person.

Should the property of an innocent owner become infected through the preservation of known infected material—which it was the duty of the health authorities to cause to be destroyed—the value of such property, if destroyed to protect the public health, may be recovered under the constitutional provision that private property shall not be taken for public use or benefit without just compensation. This, however, applies only to the property of persons who are not in any wise responsible for the contagion, and who have taken reasonable precautions to prevent or avoid it.

IV. It is competent for local boards of health, as above defined, to incur expense for the vaccination of those who are unable to pay for the same; and they may, also, make such other expenditures, as in the

*This assertion may be qualified in its application to large cities or other distributing points for newly-arriving immigrants. But even in such, with a proper system of rail and river inspection and vaccination of the unprotected, small-pox may always be held in control.

exercise of a sound discretion, may seem prudent and necessary either to effect a cure or to prevent the spread of any epidemic contagious or infectious disease. Expenses so incurred should be paid out of the general fund of the municipal body (town, city or county) incurring the same.

Concert of action between neighboring towns or communities, whose sanitary interests are often identical, is strongly enjoined upon the health authorities. Friction, clashing of authority and unnecessary expense may thus be avoided. Where there is no medical man upon a board of health, the advice and cöoperation of the county medical officer should be secured; or, if this be impracticable, a competent and legally-qualified physician should be employed. If a district or locality become seriously infected, better work will be secured, with less danger of the contagion being spread, if such district or locality be put in charge of one medical officer, instead of allowing several physicians to visit individual patients or families. Such officer should be selected with an eye not only to his medical skill and experience, but also to his knowledge and ability as a sanitary executive.

Local boards and authorities are strongly advised against the policy of concealment. Small-pox cannot be suppressed by denying its existence. It *will* out, more certainly than murder. Official reticence in this is not only useless to protect commercial interests and reputation, but is in the highest degree mischievous, in that it begets false confidence, which may lead the innocent and unwary into such danger as an honest announcement of the facts would have warned them to avoid. Insist upon prompt publicity in every instance.

The following rules are believed to cover every important detail, and are part and parcel of this Order, to be strictly enforced in appropriate cases. A copy should be left in every house where there is a case of small-pox, and their republication in the local papers, or otherwise, is recommended. By this means a more ready obedience and intelligent cöoperation will be secured, of the first importance in the present emergency.

No disease can be so surely prevented or controlled as Small-Pox. Its existence in a community argues carelessness or ignorance. The latter may be pardoned in immigrant laborers and peasants; *either is inexcusable in any American citizen.*

By order of the Board:

JOHN H. RAUCH, M.D.,
Secretary.

RULES AND REGULATIONS

For the Prevention of the Spread of Small-Pox.

1. *Vaccination.*—Systematic vaccination or re-vaccination must be at once resorted to—*vaccination* of all not previously protected, and *revaccination* in all cases where the operation has not been successfully performed within the past year. The experience of the past few months has shown such an unusual susceptibility, both to the small-pox poison and to the vaccine virus, that it is not prudent to rely on an old vaccination, no matter how typical the scar may be. The inconvenience of vaccination is trifling compared with an attack of small-pox. If it doesn't "take" one may be assured of his safety if exposed—*provided*, the operation has been properly performed. If it does "take" it is conclusive evidence that the individual was in a condition to have contracted small-pox if exposed.

Vaccination should in all cases be performed by a legally-qualified physician; and the use of bovine virus obviates certain popular objections. It is recommended that a certificate be given to each person vaccinated, and the STATE BOARD will, on certain conditions, furnish blanks for this purpose on application. It is further recommended to managers, directors, superintendents, and others employing or having control of numbers of persons—as railroads, commercial and manufacturing establishments, private schools, colleges, universities, penal and reformatory institutions, asylums, public offices, steamboats, etc.,—that they make vaccination obligatory upon all such persons.

The STATE BOARD has the legal right to order compulsory vaccination, but the expediency of such a step by the BOARD at the present time, is questionable, and it is hoped may be rendered unnecessary by the prompt action of each community for itself. Local boards and health authorities have the same right, and their orders may be enforced under penalty; or persons refusing to be vaccinated may be quarantined and otherwise treated as small-pox patients or "suspects," until the period of danger has passed. Where such persons are known to have been exposed to the contagion—as by visiting or living in close proximity to infected houses—they must, in all cases, be secluded for observation during the usual period of incubation.

2. *Isolation and Quarantine.*—Whenever it is known that any person is sick with small-pox or varioloid, isolation of the individual must be promptly and rigidly enforced. Every one in the house must be vaccinated or re-vaccinated, no matter how recently this may have been done, nor how mild the disease may appear. In view of the prevalence of the disease at the present time, and the recognized difficulty of a positive diagnosis in every case, any reasonable doubt should be resolved in favor of wise precaution. It is by no means necessary that a case should present all the typical symptoms in order to initiate a malignant epidemic—even a mild case, with little or no eruption, may do this. Local health authorities cannot too strongly insist upon this important point.

In towns or cities where there are small-pox hospitals, it is better that the patient should be removed to such at once. Where there is no such provision, the infected house should be strictly quarantined, and, if necessary, the police authority must be invoked to secure proper restrictions. An improvised hospital will be an absolute necessity if the case occurs in a crowded family or a tenement-house, where proper isolation cannot be secured. In such case, a barn, outhouse or other building can usually be made sufficiently comfortable for the patient, at small expense; or, if the weather be mild enough, a tent may be used. A yellow flag or placard, bearing the words "SMALL-POX HERE!" should be prominently displayed upon the house, and not removed until permission is given by the health authorities. *Isolation and non-intercourse are matters of the utmost importance.* (See page 2, concerning the transfer of patients from one locality to another.)

3. *The Sick-Room.*—The room selected for the sick should be large, easily ventilated, and as far from the living and sleeping-rooms of other members of the family as it is practicable to have it. All ornaments, carpets, drapery, and articles not absolutely needed in the room, should be removed. A free circulation of air from without should be admitted, both by night and day—there is no better disinfectant than pure air. Place the bed as near as possible in the middle of the room; but care should, of course, be taken to keep the patient out of draughts.

If the room connects with others which must be occupied, lock all but one door for entrance and exit, and fasten to the door-frame—top, bottom and sides—sheets of cheap cotton cloth, which must be kept wet with *thymol water*, (see page 8,) or chloride of zinc so ution—two drachms of chloride zinc to a half gallon of water. Over the door to be used, the sheet must not be tacked at the bottom nor along the full length of the lock-side of the frame, but about five feet may be left free to be pushed aside; this sheet, however, must be long enough to allow ten or twelve inches to lie in folds on the floor, and must, also, be kept wet with the disinfectant.

4. *Precautions in the Sick-Room.*—All discharges from the nose and mouth of the patient should be received on rags and immediately burned, and the same precaution should be taken with the crusts as they fall off. Night-vessels should be kept supplied with a quart or so of the *Copperas Disinfectant* (see page 8) into which all discharges should be received. All spoons, dishes, etc., used or taken from the sick-room, should be put in boiling water at once.

A pail or tub of the *Zinc Disinfectant* (see page 8) should be kept in the sick-room, and into this all clothing, blankets, sheets, towels, etc., used about the patient or in the room, sh uld be dropped immediately after use, and before being removed from the room. They should then be well boiled as soon as practicable.

5. *Attendants.*—Not more than two persons—one of them a skillful, professional nurse, if possible—should be employed in the sick-room, and their intercourse with other members of the family and with the public must be as much restricted as possible. All attendants should be re-vaccinated before taking charge of a small-pox patient.

In the event that it becomes necessary for an attendant to go away from the house, a complete change of clothing must be made, using such as has not been exposed to infection; the hands, face and hair should be washed in thymol water, or chloride of zinc solution. Following this, free exposure to the open air should be secured before approaching any one.

6. *Physicians and Visitors.*—Physicians and other necessary visitors, before entering the sick-room, should put on an outer garment, closely buttoned up, and a handkerchief or wrap about the throat and neck. Such outer garment may be a linen duster or rubber overcoat; and this, together with the neck-wrap, should be taken off in the open air immediately after leaving the sick-room, and either be dipped in the *Zinc Disinfectant*, or hung up in an out-of-the-way place exposed to the air, until the next visit. Safety consists in exposing to the open air every article of clothing that has been in any way subjected to the contagion.

Whenever practicable the precautions above prescribed (*Rule 5*) for an attendant leaving the sick-room, should be observed by the physician or visitor. Doctors and clergymen may convey contagion as readily as the laity under similar conditions; they should, therefore, take the same precautions. This advice applies also to re-vaccination at the beginning of an outbreak. Several instances of physicians, and one or two of clergymen, falling victims to the disease, have already come to the attention of the BOARD during the past few months It should be remembered that, whereas the average period of incubation for small-pox is about twelve days, vaccination acts in from six to eight. By vaccination, therefore, one may guard against the result of an exposure, even for some days after.

Physicians and clergymen may do much toward securing an intelligent compliance with these rules, both by precept and example, and their assistance should be invited in all cases.

7. *Miscellaneous.*—No inmate of the house, during the continuance of the disease, should venture into any public conveyance, or assemblage, or crowded building, such as a church or school; nor, after its termination, until permission is given by the attending physician. Letters must not be sent from the patient, and all mail matter from the house should first be subjected to a dry heat of 250–260 deg. F.* Domestic animals, dogs cats, etc., should not be allowed to enter the room of the patient, or, better still, should be excluded from the house. The privy

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* By a recent order of Acting P. M. G. Hatton, mail matter declared to be liable to contagion may be excluded from the mails, quarantined until the prohibition is removed, and then forwarded only after proper disinfection under the direction of the medical authorities.

should be thoroughly disinfected, during the entire illness, with the *Copperas Disinfectant*, three to five gallons of which should be thrown into the vault every three or four days. Water-closets should be disinfected by pouring a quart or so of this disinfectant into the receiver after each use.

8. *Care after Recovery.*—After recovery has taken place, the patient should be bathed daily, for three or four days, in a weak disinfectant—the thymol water or a solution of chloride of zinc (two drachms of the salt to a half gallon of water.) The head should be thoroughly shampooed during each bath, and the convalescent be then clothed in fresh, clean garments that have been in no way exposed to the infected air. Patients should be kept in the house at least two weeks after the crusts have all disappeared.

9. *Death and Funerals.*—In the event of death, the clothing in which the body is attired should be sprinkled with thymol water, the body wrapped in a disinfectant cerecloth (a sheet thoroughly soaked in the *Zinc Disinfectant, double strength.*) and placed in an air-tight coffin, *which is to remain in the sick-room until removed for burial.* No public funeral must be allowed either at the house or church, and no more persons should be permitted to go to the cemetery than are necessary to inter the corpse.

The local authorities must take charge of burials, and superintend the preparation of the bodies.

10. *Disinfection and after Treatment of Premises.*—After recovery or death all articles worn by, or that have come in contact with the patient, together with the room and all its contents should be thoroughly disinfected by burning sulphur. To do this, have all windows, fireplaces, flues, key-holes, doors and other openings securely closed by strips or sheets of paper pasted over them. Then place on the hearth or stove, or on bricks set in a wash-tub containing an inch or so of water, an iron vessel of live coals, upon which throw three or four pounds of sulphur. All articles in the room, and others of every description that have been exposed to infection, which cannot be washed or subjected to dry heat, and are yet too valuable to be burned, must be spread out on chairs or racks; mattresses or spring beds set up so as to have both surfaces exposed; window-shades and curtains laid out at full length, and every effort made to secure thorough exposure to the sulphur fumes. The room should then be kept tightly closed for twenty-four hours. After this fumigation—which it will do no harm to repeat—the floor and wood-work should be washed with soap and hot water, the walls and ceiling whitewashed, or, if papered, the paper should be removed. The articles which have been subjected to fumigation should be exposed for several days to sunshine and fresh air. If the carpet has unavoidably been allowed to remain on the floor during the illness, it should not be removed until after the fumigation; but must then be taken up, beaten and shaken in the open air, and allowed to remain out of doors for a week or more. If not too valuable, it should be destroyed; but, whenever practicable it should be removed from the room at the beginning of the illness. After the above treatment has been thoroughly enforced, the doors and windows of the room should be kept open as much as possible for a week or two. Where houses are isolated articles may be exposed out of doors. The entire contents of the house should be subjected to the greatest care, and when there is any doubt as to the safety of an article *it should be destroyed.*

All this work must be done—both the disinfection and the destruction of property—under the direct supervision of the local authorities.

11 *Treatment of Clothing, Bedding, etc.*—Such articles of clothing, bedding, etc., as can be washed, should first be treated by dipping in the *Zinc Disinfectant*; they should then be immediately and thoroughly boiled.

The ticking of beds and pillows used by the patient should be treated in the same manner, and the contents, if hair or feathers, should be thoroughly baked in an oven. If this cannot be done, they should be destroyed by fire, as should, in any event, all straw, husk, moss, or "excelsior" filling. The clothing of nurses should be thoroughly fumigated and cleansed before it is taken from the house, or, better still, burned, if feasible.

In this connection attention is called to the fact that the disease has already been conveyed between widely-distant points, during this epidemic, through the medium of rags and paper-stock. In the present emergency authorities will do well to quarantine shipments of these articles unless accompanied by a certificate of their disinfection under competent supervision. In any event, it is incumbent upon owners of establishments in which such articles are handled to insist upon the vaccination or re-vaccinnation of all persons engaged in the work.

12. *Finally*, if, from neglect or delay in enforcing precautionary measures, the disease shows a tendency to become epidemic, the public and private schools must be closed, church services suspended and public assemblages of people, as at shows, circuses, theatres, fairs, or other gatherings, be prohibited. Neighboring communities are justified in declaring and maintaining a non-intercourse quarantine against any place in which, by neglecting the enforcement of this ORDER, smallpox is allowed to assume epidemic proportions.

Best Disinfectants

Sunlight, fresh air, soap and water, thorough cleanliness—for general use.

For special purposes the following are the most efficient, the simplest and the cheapest:

I.—Copperas Disinfectant.

Sulphate of iron (copperas).....one and one-half pounds.
Water.....one gallon.

A convenient way to prepare this is to suspend a basket containing about sixty pounds of copperas in a barrel of water. The solution should be frequently and liberally used in cellars, privies, water-closets, gutters, sewers, cesspools, yards, stables, etc.

II.—Sulphur Disinfectant.

Roll sulphur (brimstone).....two pounds.

To a room ten feet square, and in the same proportion for larger rooms. See *Rule* 10 for mode of use.

III.—Zinc Disinfectant.

Sulphate of Zinc (white vitriol).....one and one-half pounds.
Common salt.....three-quarters of a pound.
Water.....six gallons.

For application and modes of use see *Rules* 4, 6, 9, and 11.

IV.—Thymol Water.

Made by adding one tablespoonful *Spirits of Thymol* to half a gallon of water. *Spirits of Thymol* is composed of—

Thymol.....one ounce.
Alcohol, 85%.....three ounces.

May be used for all the disinfectant purposes of carbolic acid; it is quite as efficient and has an agreeable odor. See *Rules* 3, 5 and 9, for application and uses. Where thymol is not available, chloride of zinc solution may be used—half an ounce of chloride of zinc to one gallon of water.

THIS ORDER SHOULD BE PRESERVED FOR REFERENCE.